What is claimed is:

1. A method of analyzing a set of assets selected from a plurality of thereof, historic returns data for the assets of the plurality being stored in storage accessible to a processor and
the method comprising the steps performed in the processor of:
receiving inputs indicating assets selected for the set and for each asset, a desired minimum return;
using the historic returns data to determine a probability that at least one of the selected assets will not provide the desired minimum return indicated for the asset; and
outputting the probability.

2. The method set forth in claim 1 wherein
the step of using the historic returns to determine a probability comprises the steps of:
using the multivariate normal distribution for the returns of the assets to determine the probability that each of the selected assets will provide the desired minimum return; and
determining the probability that at least one of the selected assets will not provide the desired minimum return from the probability that each of the selected assets will provide the desired minimum return.

3. The method set forth in claim 2 wherein:
in the step of using the multivariate normal distribution, the probability that each of the selected assets will provide the desired return is determined using the real option values of the assets.

4. A method of optimizing a set of assets, historic returns data for the assets being stored in storage accessible to a processor and
the method comprising the steps performed in the processor of:
receiving inputs indicating a set of scenarios for the set of assets, each scenario having values which are used in optimizing the set of assets and which vary stochastically between two extremes and a probability of occurrence for the scenario; and

determining weights of the assets in the set such that the worst-case value of the set of assets is optimized over the set of scenarios.

5. The method of optimizing set forth in claim 4 wherein:
the worst-case value of the set of assets is the worst-case real option value thereof; and
the values which are used in optimizing are the mean return and the covariance.

6. The method of optimizing set forth in claim 4 wherein:
a scenario in the set of scenarios may correspond to the historical returns data for the assets in the set of assets.

7. The method of optimizing set forth in claim 4 wherein:
a scenario in the set of scenarios may include certain assets in the set of assets which are highly correlated.

8. The method of optimizing set forth in claim 4 wherein:
a scenario in the set of scenarios may correspond to outliers in the historical returns data.

9. The method of optimizing set forth in claim 4 further comprising the step of:
receiving inputs indicating additional constraints to which the set of assets being optimized is subject; and
in the step of determining weights of the assets, determining the weights subject to the additional constraints.

10. A method of selecting a set of assets from a plurality thereof and optimizing the weights of the assets in the set, historic returns data for assets being stored in storage accessible to a processor and
the method comprising the steps performed in the processor of:
1) selecting a set of assets on the basis of a probability that at least one of the assets in a selected set will not provide the desired minimum return indicated for the asset; and

2) optimizing the weights of the assets in the selected set.

11. The method set forth in claim 10 wherein:

the probability that at least one of the assets will not provide the desired minimum return is determined using the real option values for the assets.

12. The method set forth in claim 10 wherein:

optimizing the weights of the assets is done using the real option values for the assets.

13. The method set forth in claim 10 wherein:

optimizing the weights of the assets is done using robust optimization.

14. The method set forth in claim 13 wherein:

the robust optimization optimizes over a set of user-specified scenarios, each scenario having values which are used in optimizing the set of assets and which vary stochastically between two extremes and a probability of occurrence for the scenario.

15. The method set forth in claim 10 wherein:

optimizing the weights of the assets is done subject to a constraint that the probability that the set of assets yields a desired minimum return is greater than a user-specified value *a*.

16. The method set forth in claim 15 wherein:

the optimization is done subject to a plurality of constraints *(1..n)*, a constraint c_i specifying that the probability that the set of assets yields a desired minimum return that is greater than a user-specified value a_i.

17. The method set forth in claim #C5 wherein:

optimizing the weights of the assets in the set is done using robust optimization.

18. The method set forth in claim 17 wherein:

the robust optimization optimizes over a set of user-specified scenarios, each scenario including a mean return and a covariance matrix, each of which varies stochastically between two extremes, and a probability of occurrence for the scenario

19. The method set forth in claim 10 wherein:
the asset may have a negative weight.

20. The method set forth in claim 10 wherein;
the sum of the weights of the assets in the set may exceed 1.

21. The method set forth in claim 10 wherein:
optimizing the weight of the assets is done subject to one or more additional constraints.

22. The method set forth in claim 21 wherein:
the additional constraint restricts the sum of the weights of the assets belonging to a selected subset of the assets in the set.

23. The method set forth in claim 21 wherein:
the additional constraint constrains the weight of an asset such that the amount of the asset in the set is above a minimum investment threshold.

24. The method set forth in claim 21 wherein:
the additional constraint limits constrains the set's downside risk to be less than a predetermined value *b*

25. The method set forth in claim 24 wherein;
the additional constraint is computed from the worst draw-down for each asset.

26. The method set forth in claim 24 wherein:
the additional constraint is computed from the set's average return and standard deviation.

27. The method set forth in claim 12 wherein:

the method further includes the step of:

receiving an input indicating one of a plurality of objective functions for computing the real option values for the assets; and

in the step of optimizing the weights of the assets, the optimization is done using the indicated objective function of the plurality.

28. The method set forth in claim 12 wherein:

in the step of optimizing the weights of the assets, the objective function is adjusted by assigning a premium or a discount to the real value of one or more of the assets.

29. The method set forth in claim 28 wherein:

the objective function is adjusted to take non-normal returns for the asset into the account.

30. The method set forth in claim 28 wherein:

the objective function is adjusted to take liquidity characteristics of the asset into account.

31. The method set forth in claim 28 wherein:

the objective function is adjusted to take tax sensitivity of an asset into account.

32. The method set forth in claim 28 wherein:

the objective function is adjusted to take the length of time an asset has been available into account.

33. The method set forth in claim 12 wherein:

the method further includes the step of:

receiving an input indicating one of a plurality of modes of quantifying the risk of an asset; and

in the step of optimizing the weights of the assets, the optimization is done using the indicated mode of the plurality.